Docket No: JARTYN Appl. No: 10/661,003

AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES
MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

(Currently amended) An automation <u>system</u> device[[,]] for a machine-tool, a

production machine or a robot, comprising:

at least two components connected via a data link, and

at least two sub-components associatable with a component,

wherein a data message, which includes data for the components and

a plurality of data locations, can be sent between the at least two

components, and

wherein the number of the data locations within a data message is

adjustable and each of the data locations is associatable with one of the

sub-components.

2. (Original) The automation system of claim 1, wherein the data message is

subdivided into channels, with the data of a channel being associated with a

sub-component.

3. (Original) The automation system of claim 1, wherein the data locations

have a standardized content.

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4. (Original) The automation system of claim 3, wherein the standardized

content comprises at least one of an actual value, a setpoint, a control word

and a parameter.

5. (Currently amended) The automation system of claim 1, wherein a

sub-component includes an axis or a transmitter.

6. (Original) The automation system of claim 1, wherein one component

represents a master within the data link and at least one second component

represents a slave within the data link.

7. (Original) The automation system of claim 1, wherein the data message

has a programmable variable length or a maximum length, or both.

8. (Original) The automation system of claim 1, and further comprising a

message selection table that includes messages selected from the group

consisting of standard messages and user-defined messages.

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9. (Original) A method for programming a data communication of an

automation system, for a machine-tool, a production machine or a robot, the

system including at least two components connected via a data link and

exchanging a data message that includes data locations and data for a

component, comprising:

adjusting the number of the data locations of the data message for

those components that have at least two sub-components, and

associating each of the data locations with a respective one of the sub-

components in one-to-one correspondence.

10. (Original) The method of claim 9, and further including the step of

subdividing the data message into channels using object separators,

wherein the data message in a channel refers to a sub-component.

11. (Original) The method of claim 9, wherein the data location includes a

standardized content.

12. (Original) The method of claim 11, wherein the standardized content

comprises at least one of an actual value, a setpoint, a control word and a

parameter.

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13. (Currently amended) The method of claim 9, wherein a sub-component is

programmed to represent an axis, a transmitter, a cam connection, a

terminal or another object.

14. (Original) The method of claim 9, wherein one component within the data

communication is programmed as a master and at least one other

component is programmed as a slave.

15. (Currently amended) A method for programming a data communication of

an automation system, for a machine-tool, a production machine or a robot,

the system including at least two components connected via a data link and

exchanging a data message that includes data locations and data for a

component, comprising the steps of:

programming the automation system and the at least two components

with an engineering system,

associating two sub-components with at least one component, said at

least one component or sub-component including a predefined function,

automatically composing the data message, and

automatically associating a data location with one of the sub-

components when the data message is automatically composed,

wherein the number of the data locations within a data message is

adjustable.

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- 16. (Original) The method of claim 15, and further including the step of subdividing the data message into channels using object separators, wherein the data message in a channel refers to a sub-component.
- (Original) The method of claim 15, wherein the data location includes a standardized content.
- 18. (Original) The method of claim 17, wherein the standardized content comprises at least one of an actual value, a setpoint, a control word and a parameter.
- (Currently amended) The method of claim 15, wherein a sub-component is programmed to represent an axis, a transmitter, a cam connection, a terminal or another object.
- 20. (Original) The method of claim 15, wherein one component within the data communication is programmed as a master and at least one other component is programmed as a slave.

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21. (Original) An engineering system for programming a data communication in an automation system, the automation system including at least two components connected via a data link and exchanging a data message that includes data locations and data for a component, said programming including the steps of:

adjusting the number of the data locations of the data message for those components that have at least two sub-components, and

associating each of the data locations with a respective one of the subcomponents in one-to-one correspondence.

22. (Currently amended) An engineering system for programming a data communication in an automation system, the automation system including at least two components connected via a data link and exchanging a data message that includes data locations and data for a component, said programming including the steps of:

associating two sub-components with at least one component, said at least one component or sub-component including a predefined function,

automatically composing the data message, and

automatically associating a data location with one of the subcomponents when the data message is automatically composed.

wherein the number of the data locations within a data message is adjustable.